

What is claimed is:

1. A piston adapted for reciprocal movement within a cylinder of an internal combustion engine, said piston comprising:

a body having a crown formed at the uppermost margins of said body and a skirt depending from said crown and adapted for relative sliding motion with respect to the cylinder, said skirt including an outer circumference having a major thrust side and a minor thrust side formed substantially opposite each other on said outer circumference of said skirt;

a coating bonded to said skirt so as to be juxtaposed between said skirt and the cylinder, said coating having a plurality of recesses formed thereon so as to define a predetermined pattern of recesses on the surface of said skirt, said plurality of recesses including a series of lubrication grooves extending across said outer circumference of said piston skirt at a predetermined angle in a chevron formation, operatively engaging lubricant between said skirt and the cylinder wall.

2. A piston as set forth in claim 1, wherein said plurality of recesses include a series of lubrication flow directing grooves extending in a downwardly converging manner at a predetermined angle across said outer circumference of said piston skirt in a chevron formation.

3. A piston as set forth in claim 2, wherein said plurality of recesses further include a reservoir channel located substantially at the center of said minor thrust side of said piston skirt and extending in a direction substantially parallel to the direction of reciprocal motion of said piston within the cylinder, said chevron formation of grooves terminating at said reservoir channel.

4. A piston as set forth in claim 1, wherein said plurality of recesses include a series of flow directing lubrication grooves extending in a downwardly diverging manner at a predetermined angle across said outer circumference of said piston skirt in a chevron formation.

5. A piston as set forth in claim 4, wherein said plurality of recesses further include a reservoir channel located substantially at the center of said major thrust side of said piston skirt and extending in a direction substantially parallel to the direction of reciprocal motion of said piston within the cylinder, said chevron formation of grooves terminating at said reservoir channel.

6. A piston as set forth in claim 1, wherein said plurality of recesses include a series of lubrication flow directing grooves extending in a downwardly converging manner at a predetermined angle across said minor thrust side in a chevron formation.

7. A piston as set forth in claim 6, wherein said plurality of recesses further include a reservoir channel located substantially at the center of said minor thrust side and extending in a direction substantially parallel to the direction of reciprocal motion of said piston within the cylinder, said chevron formation of grooves terminating at said reservoir channel.

8. A piston as set forth in claim 1, wherein said plurality of recesses include a series of lubrication flow directing grooves extending in a downwardly diverging manner at a predetermined angle across said major thrust side in a chevron formation.

9. A piston as set forth in claim 8, wherein said plurality of recesses further include a reservoir channel located substantially at the center of said major thrust side and extending in a direction substantially parallel to the direction of reciprocal motion of said piston within the cylinder, said chevron formation of grooves terminating at said reservoir channel.

10. A piston as set forth in claim 1, wherein said coating is a polymer coating.

11. A piston as set forth in claim 1, wherein said coating is a metallic coating.

12. A piston adapted for reciprocal movement within a cylinder of an internal combustion engine, said piston comprising:

a body having a crown formed at the uppermost margins of said body and a skirt depending from said crown and adapted for relative sliding motion with respect to the cylinder, said skirt including an outer circumference having a major thrust side and a minor thrust side formed substantially opposite each other on said outer circumference of said skirt;

a coating bonded to said skirt so as to be juxtaposed between said skirt and the cylinder, said coating having a plurality of recesses formed thereon so as to define a predetermined pattern of recesses on the surface of said skirt, said plurality of recesses including a series of intersecting grooves extending across the outer circumference of said piston skirt at a predetermined angles in a substantially hatch-like manner, operatively engaging lubricant between said skirt and the cylinder wall.

13. A piston as set forth in claim 12, wherein said coating is bonded to said major thrust side and said minor thrust side of said piston skirt and adapted to operatively engage lubricant between said major thrust side and the cylinder wall and said minor thrust side and the cylinder wall.

14. A piston as set forth in claim 12, wherein said coating is a polymer coating.

15. A piston as set forth in claim 12, wherein said coating is a metallic coating.

16. A piston adapted for reciprocal movement within a cylinder of an internal combustion engine, said piston comprising:

a body having a crown formed at the uppermost margins of said body and a skirt depending from said crown and adapted for relative sliding motion with respect to the cylinder, said skirt including an outer circumference having a major thrust side and a minor thrust side formed substantially opposite each other on said outer circumference of said skirt;

a coating bonded to said skirt so as to be juxtaposed between said skirt and the cylinder, said coating having a plurality of recesses formed thereon so as to define a predetermined pattern of recesses on the surface of said skirt, said plurality of recesses including a series of lubrication retaining discs in uniform spaced relation with respect to each other to provide lubrication retention along said outer circumference of said piston skirt.

17. A piston as set forth in claim 16, wherein said coating is bonded to said major thrust side and said minor thrust sides of said piston skirt relation and adapted to operatively engage

lubricant between said major thrust side and the cylinder wall and said minor thrust side and the cylinder wall.

18. A method of applying a predetermined pattern coating to a piston comprising the steps of:

    directing a silk screen having a predetermined pattern in proximate relation to the outer surface of the piston skirt;

    applying a coating to the outer surface of the piston skirt through the silk screen to impart a predetermined pattern, and

    curing the coating on the outer surface of the piston.

19. The method of claim 18, further comprising the steps of:

    locating the one of the thrust sides of a piston;

    directing a silk screen having a predetermined pattern specific to a particular thrust side of a piston in proximate relation to the corresponding thrust side of the piston;

    applying the coating to the corresponding thrust side of the piston through the silk screen to impart a predetermined pattern;

    locating the opposing thrust side of a piston;

    directing a silk screen having a predetermined pattern specific to the opposing thrust side of a piston in proximate relation to the opposing thrust side of the piston;

    applying the coating to the opposing thrust side of the piston through the silk screen to impart a predetermined pattern, and

curing the coatings applied to the piston skirt corresponding to the major and minor thrust sides of the piston.